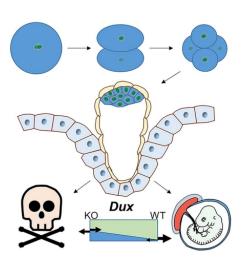


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Conditional DUXC knockout mouse model

A conditional DUXC knockout mouse model for use as a basic research tool.



Applications

Basic research tool

Technology Overview

Organism: Mus musculus, mouse

Background: C57BL/6

Product format: Live animals

Description: The Double homeobox (Dux) gene is a repeated gene array in humans and mice. In a C57BL/6 mouse background, this array was replaced with a single copy of the repeat containing the DUXC gene flanked by loxP sites at both ends. This created a conditional allele that can be deleted with Cre expression. Briefly, mouse Dux is not essential for viability or fertilization nor for zygotic genome activation, however the knockout embryos exhibit postimplantation development failures.

Phase of Development

TRL: 7-8

Conditional DUXC knockout mice have been generated, characterized, and published.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

Technology ID 2023-164

Category Life Sciences/Research Tools

View online page



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Researchers

• Michael Kyba, PhD, Pofessor, Department of Pediatrics

References

 Darko Bosnakovski, Micah D Gearhart, Si Ho Choi, Michael Kyba(January 2021), https://doi.org/10.1093/biolre/ioaa179, https://academic.oup.com/biolreprod/article/104/1/83/5913241, 104, 83–93